

In the claims:

1-12. (Previously Canceled)

13. (Currently Amended) A method of forming a structural assembly, comprising the step of:
affixing a first pre-cured assembly to a 3-D woven textile pre-form impregnated with an uncured resin, an adhesive film being located between said first pre-cured assembly and said pre-form, said pre-form having a base and ~~two first and second~~ legs extending from the base, said first pre-cured assembly being located on a side of the base opposite the legs;
affixing a second pre-cured assembly between ~~said first and second~~ legs of said 3-D woven textile pre-form with an additional adhesive film being located between said second pre-cured assembly and inner surfaces of ~~said first and second~~ legs of said pre-form;
curing said resin and said adhesive films to form the structural assembly; wherein
said curing is performed by placing a leg side of a first pressure intensifier of flexible material against an exterior surface of ~~one of said legs~~ ~~said first leg~~ and placing a base side of said first pressure intensifier against said base, ~~said leg side of said first pressure intensifier extending past and end of said first leg for contact with said second pre-cured assembly, and said base side of said first pressure intensifier extending past a first end of said base for contact with said first pre-cured assembly,~~ and placing a leg side of a second pressure intensifier of flexible material against an exterior surface of ~~the other of said legs~~ ~~second leg~~ and placing a base side of said second pressure intensifier against said base, ~~said leg side of said second pressure intensifier extending past an end of said second leg for contact with said second pre-cured assembly, and said base side of said first pressure intensifier extending past a second end of said base for contact with said first pre-cured assembly,~~ each of said pressure intensifiers having an exterior side that extends from an edge of said base side to an edge of said leg side; and
inserting said first and second pre-cured assemblies along with said pre-form, adhesive films, and pressure intensifiers into a vacuum bag, then evacuating the vacuum bag, causing the pressure intensifiers to press said base and legs of said pre-form against portions of said pre-cured assemblies.

14. Canceled

15. (Currently Amended) The method of claim 13, wherein ~~said first pre-cured assembly and said second pre-cured assembly are pre-cured, laminated composite structures;~~

said ends of said first and second legs and second first and second ends of said base have tapered sections that are tapered in thickness; and

each of said leg sides and each of said base sides of said first and second pressure intensifiers are straight surfaces located in a single plane and spaced from said tapered sections prior to evacuating the vacuum bag.

16. (Previously Amended) The method of Claim 13, wherein said step of curing is implemented with heat and pressure.

17. (Canceled)

18. (Previously Amended) The method of claim 13, wherein said exterior side of each of said pressure intensifiers is concave.

19. (Previously Amended) The method of claim 13, wherein said step of curing is implemented with an E-Beam resin system.

20. (Previously Amended) The method of claim 13, further comprising the step of applying a composite overwrap ply on said exterior surfaces of said legs of said pre-form prior to pressing said leg sides of said pressure intensifiers against said legs.

21. (Previously Canceled)

22. (Previously Amended) The method of claim 13, wherein said pressure intensifiers are rubber.

23. (Canceled)

24. (Currently Amended) A method of forming structural assemblies with pre-cured laminated composite structures, comprising the steps of:

providing a woven textile pre-form with a base and a pair of legs extending from the base at a 90 degree angle, the pre-form being impregnated with an uncured resin, said base having first and second portions extending from said first and second legs, respectively, said first and second portions of said base and said legs having tapered end sections that taper in thickness;

affixing a first adhesive film between a first pre-cured laminated composite structure and the base of the pre-form;

affixing an additional adhesive film between one side of a second pre-cured laminated composite structure and an inner surface surfaces of one of the said first and second legs of said 3-D woven textile pre-form, and inserting an additional adhesive film between an opposite side of said second pre-cured laminated composite structure and an inner surface of the other of said legs; then

providing a pair of flexible first and second pressure intensifiers, each being triangular in cross section, said first pressure intensifier having a base side located in a single plane that has a length greater than a length of said first portion of said base and a leg side located in a single plane that has a length greater than a length of said first leg, said second pressure intensifier having a base side located in a single plane that has a length greater than a length of said second portion of said base and a leg side located in a single plane that has a length greater than a length of said second leg, and placing one of said base side of said first pressure intensifiers intensifier in contact with said first portion of said base and said leg side of said first pressure intensifier in contact with an exterior surface of one of said legs first leg and the other of said base side of said second pressure intensifiers intensifier in contact with said second portion of said base and said leg side of said second pressure intensifier in contact with an exterior surface of the other of said second legs leg; then

enclosing said first and second pre-cured laminated composite structures, said pre-form and said pressure intensifiers within a vacuum bag and evacuating the bag; then

curing said adhesive films and said 3-D woven textile pre-form to form the structural assemblies.

25. Canceled

26. (Currently Amended) The method of claim 24, wherein each of said pressure intensifiers has a base side that contacts said base of said pre form, a leg side that contacts said exterior surface of one of said legs of said pre form, and an exterior side that extends from an edge of said base side to an edge of said leg side; and wherein
a plane normal to said exterior side bisects a corner defined by an intersection of said base of said pre form and one of said legs, prior to evacuating the bag, a clearance exists between said base side of said first pressure intensifier and said tapered end section of said first portion of said base and between said leg side of said first pressure intensifier and said tapered end section of said first leg, and a clearance exists between said base side of said second pressure intensifier and said tapered end section of said second portion of said base and between said leg side of said second pressure intensifier and said tapered end section of said second leg

27. (Previously Amended) The method of claim 24, wherein said step of curing is implemented by heating the vacuum bag.

28. (Previously Amended) The method of claim 24, wherein said step of curing is implemented with an E-Beam cure resin system.

29. (Previously Amended) The method of Claim 24, further comprising the step of applying a composite overwrap ply on said exterior surfaces of said legs of said pre-form

30. – 31 (Previously Canceled)

32. (Canceled)

33.- 38 (Previously Canceled)

39. (Canceled)

40. – 42 (Previously Canceled)

43. (Currently Amended) The method of Claim 24, wherein said pressure intensifiers are formed of rubber.

44. (Previously Canceled)

45. (Canceled)

46. (Currently Amended) A method of forming structural assemblies with pre-cured laminated composite structures, comprising the steps of:

providing a woven textile pre-form with a base and a pair of first and second legs extending from the base at an angle, defining a slot between them and corners at intersections of the legs and the base, the base having a first portion extending from the first leg and a second portion extending from the second leg, the first and second portions and first and second legs having tapered end sections that taper in width, the pre-form being impregnated with an uncured resin;

affixing a first adhesive film between a pre-cured laminated composite first structure and the base of the pre-form on a side opposite the legs;

inserting a pre-cured laminated composite second structure into the slot with an additional adhesive films film between inside surfaces of the legs and the second structure;

providing a pair of flexible pressure intensifiers, each of the pressure intensifiers being a three-sided polygon in cross-section, having two straight inner sides intersecting each other, defining a corner portion, and an exterior side that extends diagonally between edges of the inner sides, and placing the corner portion of each in contact with one of the corners formed by the base and the legs, the inner sides of each of the pressure intensifiers extending past the tapered end sections for contact with the first and second structures; then

inserting the first and second structures, along with the pre-form, adhesive films and pressure intensifiers into a vacuum bag; and

evacuating the vacuum bag and applying heat to cure said adhesive films and pre-form to form the structural assemblies.

47. (Previously Added) The method of Claim 13, wherein said base side and said leg side of each of said pressure intensifiers are at right angles to each other, and each of said pressure intensifiers is triangular in cross section.

48. (Currently Amended) The method of claim 24, wherein said exterior side of each of said pressure intensifiers ~~has a base side that contacts said base of said pre form, a leg side that contacts said exterior surface of one of said legs of said pre form and a~~ ~~is concave~~ ~~exterior side~~ that extends from an edge of said base side to an edge of said leg side.